Claims:

1. A method for making data transmission in a telecommunication network more effective, which comprises layer structure protocol means for data transmission, which protocol means comprise at least an upper layer and a lower layer, wherein the purpose of the lower layer (12) is at least to compose a data unit (6) to be transmitted to the upper layer (14) from one or more segments (9a, 9b), in which method one or more errors (5a) occurring in the received segments (1a, 1b) is detected, **characterized** in that said data unit (6) to be transmitted to the upper layer is composed from one or more segments (9a, 9b) which contain one or more errors (5a), wherein information on the location of one or more errors (5a) is also transmitted to the upper layer (14).

2. The method according to claim 1, in which it is also detected that an entire data unit (1a, 1b) to be received is missing, **characterized** in that the location of the segment (9a, 9b) of said missing data unit (1a, 1b) in the data unit (6) to be composed is interpreted as an erroneous area (5a).

3. The method according to claim 1 or 2, in which the erroneous data units (1a, 1b) are corrected in the lower layer (12) within a determined delay using acknowledgements and retransmissions, **characterized** in that in the lower layer (12) the data unit (6) to be transmitted to the upper layer (14) is composed from segments (9a, 9b) located in the received data units (1a, 1b) after all data units (1a, 1b) are received accurately, or when within a given delay there is not enough time to correct the erroneous or missing data units (1a, 1b) by means of retransmission.

4. The method according to any of the claims 1 to 3, in which the size of the segment (9a, 9b) located in the received data unit is determined in the upper layer (14), **characterized** in that said error information to be transmitted to the upper layer (14) comprises the sequence number of the segments (9a, 9b) located in the received data unit (1a, 1b) and containing the error (5a), wherein in the upper layer (14) the areas (5b) containing the errors (5a) are calculated on the basis of the error information and the size of said segment (9a, 9b).

5. The method according to any of the claims 1 to 3, in which the starting point (8a) and the end (8b) of the segments (9a, 9b) located in the received data units and containing one or more errors are determined in the upper layer (14), **characterized** in that said error information to be transmitted to the upper layer (14) contains the sequence number of those segments (9a, 9b) located in the received data units (1a, 1b) in which the error (5a) is located, wherein the areas (5b) within which the errors (5a) are located are calculated in the upper layer (14) on the basis of error information and the starting point (8a) and the end (8b) of said segment (9a, 9b).

6. The method according to claim 4 or 5, wherein said segment (9a, 9b) also contains at least control information (4) of the upper protocol layer or a header (3), **characterized** in that the composed data unit (6) is discarded when the error (5a) is located at least partly in such a section of the composed data unit (6) which contains control information (4) of the upper protocol layer or a header (3).

7. The method according to any of the claims 1 to 3 in which the starting point (7a) and the end (7b) of the error are determined in the lower layer (12), **characterized** in that said error information to be transmitted to the upper layer (14) comprises the starting point (7a) and the end (7b) of the error (5a) of the composed data unit (6).

8. The method according to claim 7, wherein the segment (9a, 9b) also comprises at least control information (4) of an upper protocol layer or a header (3), **characterized** in that the composed data unit (6) is discarded when the error (5a) is located at least partly in such a section of at least partly composed data unit (6) which contains control information (4) of an upper protocol layer or a header (3).

9. The method according to any of the claims 1 to 8, **characterized** in that said lower layer is an RLC layer and said upper layer is a PDCP layer.

10. The method according to any of the claims 1 to 9, **characterized** in that said received data unit is an RLC PDU unit and said composed data unit is an RLC SDU unit.

11. Protocol means of a telecommunication network for data transmission, which layer structure protocol means comprise at least an upper layer and a lower layer, wherein the purpose of the lower layer (12) is to compose a data unit (6) to be transmitted to an upper layer (14) from one or more segments (9a, 9b) contained in the received data units (1a, 1b) and to detect one or more errors (5a) occurring in the received segments (1a, 1b), **characterized** in that to make data transmission more effective, the purpose of said lower layer (12) is also to compose the data unit (6) to be transmitted to the upper layer from one or more segments (9a, 9b) containing one or more errors (5a), and also to transmit information concerning the location of said one or more errors (5a) to the upper layer (14).

12. A wireless terminal arranged to function in a telecommunication network and comprising layer structured protocol means for data transmission, which protocol means comprise at least an upper layer and a lower layer, wherein the purpose of the lower layer (12) is to compose a data unit (6) to be transmitted to an upper layer (14) from one or more segments (9a, 9b) contained in the received data units (1a, 1b) and to detect one or more errors (5a) occurring in the received segments (1a, 1b), **characterized** in that to make data transmission more effective, the purpose of said lower layer (12) is also to compose the data unit (6) to be transmitted to the upper layer from one or more segments (9a, 9b) containing one or more errors (5a), and also to transmit information concerning the location of said one or more errors (5a) to the upper layer (14).